

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference U180.12PC.11	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/IB 03/00332	International filing date (day/month/year) 09/01/2003	(Earliest) Priority Date (day/month/year) 09/01/2002
Applicant UNIVERSITY OF LAUSANNE		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 9 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☒ furnished subsequently to this Authority in written form.

☒ furnished subsequently to this Authority in computer readable form.

☒ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☒ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☒ Certain claims were found unsearchable (See Box I).

3. ☒ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

As far as claims 25-30 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 03/00332

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

As far as claims 25-30 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-7, 17-30 (completely); 8-10 (partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7, 17-30 completely, 8-10 partially

peptides comprising sequence of Seq ID No. 2 i.e. the sequence SX[SP]V[GL]XPPSPRP, nucleic acid encoding it, the vector comprising the nucleic acid, and the cell comprising the vector, composition comprising the peptide and methods using peptide. This includes peptides comprising sequence of Seq ID No. 5, i.e. the sequence SXSVGX covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX

2. claims: 8-10 partially

peptides comprising sequence of Seq ID No. 6, i.e. the sequence PPSRP covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX and peptides comprising the sequences of Seq ID Nos 7-11 having a common SPR core sequences as far as they do not fall under scope of an invention mentioned above

3. claims: 8-16 partially

peptides comprising the sequence of Seq ID No. 12, i.e. GQPFSPFS as far as they do not fall under scope of an invention mentioned above

4. claims: 8-16 partially

peptides comprising the sequence of Seq ID No. 14, i.e. SPPSNL as far as they do not fall under scope of an invention mentioned above

5. claims: 8-16 partially

peptides comprising the sequence of Seq ID No. 15, i.e. FNPWSSKPSLL as far as they do not fall under scope of an invention mentioned above

6. claims: 8-16 partially

peptides comprising the sequence of Seq ID No. 16, i.e. NASVGNDHSHSH as far as they do not fall under scope of an invention mentioned above

7. claims: 8-16 partially

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

peptides comprising the sequence of Seq ID No. 17, i.e. EHMALTYPERP as far as they do not fall under scope of an invention mentioned above

8. claims: 8-10 partially

peptides comprising the sequence of Seq ID No. 22, i.e. the sequence XGVXS covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX as far as they do not fall under scope of an invention mentioned above

9. claims: 8-10 partially

peptides comprising the sequence of Seq ID Nos 18-21 and 23-28 having the core sequence RPS covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX as far as they do not fall under scope of an invention mentioned above

10. claims: 8-10 partially

peptides comprising the sequence of Seq ID No. 29, i.e. the sequence SFPSFFPQG covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX as far as they do not fall under scope of an invention mentioned above

11. claims: 8-10 partially

peptides comprising the sequence of Seq ID Nos 30-31, i.e. the sequence LNSPP covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX as far as they do not fall under scope of an invention mentioned above

12. claims: 8-10 partially

peptides comprising the sequence of Seq ID No. 32, i.e. the sequence LLSPKSWPNF covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX as far as they do not fall under scope of an invention mentioned above

13. claims: 8-10 partially

peptides comprising the sequence of Seq ID No. 33, i.e. the sequence HSHSDNGVSAN covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX as far as they do not fall under scope of an invention mentioned above

14. claims: 8-10 partially

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

peptides comprising the sequence of Seq ID No. 34, i.e. the sequence PRFPYTLAMHG covalently linked to sequence of Seq ID No. 36, i.e. the sequence XRKKRRQRRRX as far as they do not fall under scope of an invention mentioned above

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/00332

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/47 A61K38/17 C12N5/10 C12N15/12 C12N15/63
 A61P5/48 A61P25/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, WPI Data, Sequence Search, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/27268 A (UNIV LAUSANNE ; BONNY CHRISTOPHE (CH)) 19 April 2001 (2001-04-19) the whole document	1-10, 17-30
X	----- BONNY C ET AL: "Cell-permeable peptide inhibitors of JNK: novel blockers of beta-cell death." DIABETES. JAN 2001, vol. 50, no. 1, January 2001 (2001-01), pages 77-82, XP002274267 ISSN: 0012-1797 the whole document	1-10, 17-30
P,A	----- WO 02/081504 A (UNIV JEFFERSON) 17 October 2002 (2002-10-17) see Seq ID NO 9 in table 1; claim 5; table 1 ----- -/-	11-14,16

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

30 March 2004

Date of mailing of the international search report

19. 07. 2004

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/00332

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	<p>WO 02/081505 A (WIESEHAN KATJA ; WILLBOLD DIETER (DE); IMB INST FUER MOLEKULARE BIOTE) 17 October 2002 (2002-10-17) see peptide SVSVGMPSPRP in figure 1figure 1</p> <p>-----</p>	11-16

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 03/00332

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0127268	A	19-04-2001	US 6610820 B1 26-08-2003
		AU 7938200 A	23-04-2001
		CA 2387184 A1	19-04-2001
		EP 1303600 A2	23-04-2003
		WO 0127268 A2	19-04-2001
		JP 2003511071 T	25-03-2003
		US 2003220480 A1	27-11-2003
		US 2004082509 A1	29-04-2004
		US 2002127676 A1	12-09-2002
		US 2003108539 A1	12-06-2003
WO 02081504	A	17-10-2002	CA 2442909 A1 17-10-2002
		EP 1373308 A2	02-01-2004
		WO 02081504 A2	17-10-2002
		US 2003013844 A1	16-01-2003
		US 2004086512 A1	06-05-2004
WO 02081505	A	17-10-2002	DE 10117281 A1 24-10-2002
		WO 02081505 A2	17-10-2002
		EP 1379546 A2	14-01-2004